

CTNNBL1 siRNA (m): sc-142622

BACKGROUND

CTNNBL1 (catenin, β like 1), also known as NAP (nuclear-associated protein) or P14L, is an evolutionarily conserved protein with structural homology to members of the armadillo family, including β -catenin. CTNNBL1 is expressed in a variety of tissues with highest expression levels found in heart, spleen, testis, placenta, thyroid and skeletal muscle. Localizing to the nucleus, CTNNBL1 contains a bipartite nuclear localization signal, an acidic domain, a leucine-isoleucine zipper, an acidic domain and phosphorylation sites. Via its C-terminus, CTNNBL1 is believed to play a role in apoptosis. In addition, multiple SNPs (single nucleotide polymorphisms) in the CTNNBL1 have been associated with fat mass and body mass index (BMI), suggesting a possible role for CTNNBL1 in the development of obesity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Ctnnbl1* (mouse) mapping to 2 H1.

PRODUCT

CTNNBL1 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see CTNNBL1 shRNA Plasmid (m): sc-142622-SH and CTNNBL1 shRNA (m) Lentiviral Particles: sc-142622-V as alternate gene silencing products.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNases and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

CTNNBL1 siRNA (m) is recommended for the inhibition of CTNNBL1 expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

GENE EXPRESSION MONITORING

CTNNBL1 (A-5): sc-376847 is recommended as a control antibody for monitoring of CTNNBL1 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor CTNNBL1 gene expression knockdown using RT-PCR Primer: CTNNBL1 (m)-PR: sc-142622-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.